ASL

Australian Society for Limnology Inc.

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AUSTRALIAN SOCIETY FOR LIMNOLOGY INC.

The Australian Society for Limnology Inc. (ASL) is an Australian-based scientific society whose focus is the study and management of inland waters. The ASL was established in 1961, and has a current membership of over 650 researchers, managers, engineers, teachers and tertiary level students from all states and territories. Members have a strong professional interest in inland aquatic issues, including the maintenance of biodiversity, the maintenance and/or restoration of water quality, and the wise use of aquatic resources. The Society also has a strong interest in fostering the scientific and intellectual development of tertiary students.

The Society includes members working in government agencies, tertiary institutions and many industries related to aquatic resources. Through their daily activities, members have contact with local communities and are in a sound position to interpret and advise on inland water issues. The Society has a substantial knowledge base, and has assumed a responsibility to ensure that this is available to those who manage inland waters.

Accordingly, the charter of the ASL is to further our understanding of Australia's inland waters and to promote their wise use and sustainable management. In this manner we will contribute to the continued existence of this valued resource and the maintenance and enhancement of the quality of life for all Australians. The ASL regularly produces a newsletter with notes on limnological activities, articles of interest, book reviews and announcements of upcoming events likely to be of interest to Members.

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CONTENTS

CONTENTS	3
FROM ME	5
PRESIDENT'S REPORT	6
ANNOUNCEMENT ASL CONGRESS - ADELAIDE 2004	7
SCUTTLEBUTT, RUMOUR AND PRATTLE	8
POSTCARD	15
BILL WILLIAMS TRAVEL SCHOLARSHIP REPORT	17
A BIT OF FUN	19
ASLO 2005 ANNOUNCEMENT	20
CENTRE FOR RIVERINE LANDSCAPES - RESEARCH TRAINING AND SCHOLARSHIPS	21
INFORMATION FROM AND FOR MEMBERS	22
FASTS	28
CONFERENCE CAPERS	41
HONOURS SUMMARY	42
FORTHCOMING CONFERENCES/WORKSHOPS	43
ASL VOLUNTEERS	46
ASL MEMBERSHIP FORM	50
ELECTRONIC NEWSLETTER APPLICATION FORM	52
REGIONAL EXECUTIVE MEMBERS 2003-2004	53

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All articles should be forwarded, if possible, as unformatted text on a disk or via email.

ASL Home Page - http://www.asl.org.au/

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Membership Information and contact details of the Regional Executive Members can be found at the back of this Newsletter.

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FROM ME

Spring has sprung (but don't ask me about Spring lambs!)

Thank you to all of you who contributed items to the September newsletter. The quality of the newsletter is a direct reflection of the wide variety of interesting news that many of you contributed. All I do is put your items together in one newsletter!

This edition has been fun to compile, with lots of different contributors. Danielle Warfe provides us with a report after winning the Bill Williams Travel Scholarship Award last year, and Katrina Lansdown and Mike Grace provide a summary of Katrina's Honours project.

This edition is possibly not quite as newsy as possible due no doubt to the pressure of work and/or overseas conference attendance. Keep those news items and bits and pieces coming in - you are the only access I have to much regional, state and interstate news in the limnological area.

Congratulations to Professor Peter Cullen, former CEO of the CRC for Freshwater Ecology, currently Thinker in Residence at the University of Adelaide, who was awarded the Officer of the Order of Australia (AO) at the Queen's Birthday Honours, citation as follows:

"For service to freshwater ecology, particularly in the areas of policy development, implementation and sustainability in relation to water and resource management, and to education."

Please note that All Positions for the Regional Executive Members are now open for nomination, and members will be elected at the AGM during the Adelaide Congress.

See you there!

Best wishes,

Rhonda

PRESIDENT'S REPORT

Roll on spring! And the Congress in Adelaide. By now, you will all have your abstracts in and be planning your trip *(good joke Andrew - Ed.)*. We've had a strong field of nominations for Early Career Excellence Awards and the ASL Medal - thanks for taking this opportunity to recognize the inspirational work done by our members at all levels of their career. Our international reputation continues to shine, evidenced by the excellent presentations by Australian researchers at the SIL (International Society for Limnology) meeting in Finland and at the Second International Symposium on Riverine Landscapes held in Storforsen, Sweden. There is also an undercurrent of humour and vitality that seems to characterize the Australian contribution to world limnology and even some of our best known limnologists will relax with local wildlife or contribute to the volume of discussion in the evenings in memorable ways.

Water continues to be on the political agenda as well. I want to thank the members of ASL who contributed to Science Week by talking about water issues as well as the many ASL members who tirelessly work towards the challenge of protecting and researching our inland waters. It is not until we see the state of some of the waterways overseas that we realize how fortunate we are here in Australia - but we need to protect what we have and manage our water resources wisely. As you will know, the Science meets Parliament was postponed this year but we hope to have a strong contingent from ASL for next year and are already budgeting for some support for members to attend this event.

This will be my last President's Report in the newsletter as Sabine Schreiber takes over at the Adelaide congress in November. I would like to take this opportunity to formally thank past and present members of the Executive, especially the stalwarts Margaret Hart, Richard Marchant, and Sabine. Particular thanks go to Rhonda Sinclair and Simon Josey who both do a magnificent job with our newsletter and web site respectively, and it is largely through their efforts that we maintain the communications and networks that make the Australian Society for Limnology such a collegiate and supportive society despite the geographic spread of our members. Finally, I want to thank the organizers of the coming Adelaide congress for what is shaping up to be another great meeting.

See you in November.

Andrew Boulton

* * * ANNOUNCEMENT * * *

ASL CONGRESS ~ ADELAIDE 2004

HAVE YOU REGISTERED???? Register on-line at http://www.asl.org.au/asl_congress_2004.htm

Dear members,

In order to give all members the opportunity to nominate for the ASL Executive we would like to call for nominations.

If you are interested in nominating for any of the executive positions, please complete the form below and return it to Dr Richard Marchant (see contact details below).

All positions for the Regional Executive Members are now open for nominations.

Members will be elected at the AGM during the Adelaide Congress.

NOMINATION FORM

I would like to nominate for the position of _____ on the ASL committee for the upcoming year, 2004-2005.

Name:_____

Signature:_____

Seconder Name:_____

Seconder Signature:_____

Date: _____

Please return form prior the 2004 AGM to:

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Museum of Victoria
GPO Box 666E Melbourne 3001
Email: rmarch@museum.vic.gov.au

SCUTTLEBUTT, RUMOUR AND PRATTLE

ECOWISE/WSL CONSULTANTS

Ecowise/WSL have both recently advertised for additional staff, and we are pleased to welcome **Nirvana Searle** (ex DIPNR) to the Brisbane team and **Sherri Lehmann** (ex Victorian Museum) to the Melbourne team. Both have significant limnological and taxonomic experience to bring to the combined aquatic ecology group, and we look forward to the opportunities that Nirvana and Sherri can bring.

Since combining resources, Ecowise/WSL have been able to work together on an impact assessment project north of Brisbane. **Garry Bennison** and **Kim Piercy** recruited **Daniel Salienko** from the Melbourne team to assist with aquatic and riparian vegetation assessments. This project, also involving aquatic fauna surveys, is a great opportunity for our two groups to combine skill sets.

Denise Betts and **Chris Bloink** have been developing our marine voucher collection while working on the identification of estuarine invertebrates from Cairns as part of an impact assessment. Denise is also getting involved in the Maribyrnong River estuary "Living Museum" - a community project designed to provide locality based information on the estuary's ecology. Meanwhile, the water quality monitoring of the Docklands precinct has begun to include phytoplankton monitoring, with the possibility of estuarine eutrophication modelling being investigated.

In autumn **Cameron Amos**, **Chris Bloink**, **Genevieve Hehir** and **Denis Betts** were involved in a week of sampling water, macroinvertebrates and fish at Macleods Morass, Bairnsdale in SE Victoria. The work is a part of a survey to examine the effects of treated waste water on this freshwater marsh, and to assist agencies develop management and monitoring plans for this RAMSAR wetland. It is hoped that this project can be used to assist the development of ecological character assessment protocols for RAMSAR wetlands, in conjunction with the work of **Rhonda Butcher**. Other work to be completed there will be done by **Jim Reside** who is surveying vegetation, frog and bird communities. The scariest part of the work was in the knowledge that it was duck hunting season and it could possibly become biologist season (though some of the heads present would not look good on any wall).

The sampling of Patawalonga and Torrens Catchment sites continued through the soggy months. South Australia received some significant rainfall in July and most site markers were washed downstream, along with much of the Adelaide hills. This left **Patrick Maiden** stuck in the city of churches with nothing to do, except give his nephews some lessons in kicking the football like Matty Lloyd.

From

Patrick Maiden

University of New England, Ecosystem Management

We have survived another long and arduous winter on the Tablelands, primarily by scheduling coastal field trips as soon as the weather forecasters mention snow!

PhD students **Emilie Warner** and **Ruth Harlow** have made the Nymboida River their home this winter as they begin to apply the Downes et al (2002) framework to assess the effects of water extraction on the River. Emily is currently examining the spatial variability of biofilm structure and function within riffles and among rivers, while Ruth is concentrating her efforts on benthic macroinvertebrates. Further south, **Ben Wolfenden** and **Sarah Mika** are busily collecting data linking the hyporheic zone and benthic productivity in riffles as they prepare for the large woody debris reintroduction into the Hunter River in mid-September.

Heading west, **Kim Jenkins**, **Darren Ryder** and PhD student **Ben Hoggard** have been busy locating sites and collecting pilot data as part of their project examining biogeochemical cycles and trophic links in permanent and temporary wetlands of the Macquarie Marshes. In another drought ridden winter west of the divide, Ben has been conducting flooding experiments in the lab to examine the emergence of microinvertebrates from dry floodplain sediments as a potential food source for larval fish. Meanwhile, Kim and Darren have been delving into the impacts of flooding history on benthic, water column and littoral biofilm productivity.

Gus Macrae is coming to the end of his Honours project examining microinvertebrate, macroinvertebrate and fish communities in Marshes, finding it hard work to find any fish in the permanent creeks. More results in the next issue. From the Marshes, we head south to the Murrumbidgee River, where **Darren Ryder** and **Nerida Bleakley** (in collaboration with **Sue Vink** and **Phiilip Ford** from CSIRO) are continuing their project which attempts to link riverine productivity, water borne contaminants (nutrients, salts) and regulated flow regimes in the mighty 'bidgee. We will all continue to pray to the rain gods.

Next issue we will have all thawed out and have news of all the exciting results from this years Honours students.

From

Darren Ryder

AUSTRALIAN CENTRE FOR TROPICAL FRESHWATER RESEARCH, JAMES COOK UNIVERSITY, TOWNSVILLE

As another warm and dry winter draws to a close, we are gearing up for our traditional heavy load of late dry season field work as this is when water quality and general aquatic conditions are at their worst. **Colton Perna** and **Aaron Davis** recently completed two weeks of fish survey in the Gregory River in the southern Gulf of Carpentaria, with **John Dowe** following with two weeks of riparian vegetation survey. The Gregory is one of the few perennially-flowing rivers in the dry tropics, with its ever reliable flow coming from its large underground aquifer. This hydrology makes it one of the most valuable, and most attractive rivers in the region.

George Lukacs gave presentations at the 7th INTECOL International Wetlands conference in the Netherlands and the 29th SIL International Congress of Limnology in Finland. **Jon Brodie** recently attended a planning meeting in Fiji, with WWF-South Pacific, Wildlife Conservation Society and the University of the South Pacific, to develop a project to set up a network of marine reserves, including land-sea elements, in Fiji. The ever reliable **Vivien Danis** has taken 12 months maternity leave after the birth of her third child.

PhD student **Carrie Preite** attended an algal workshop in Rockhampton. Carrie is studying algal dynamics in three different sub-catchments of the Burdekin catchment, each of which has distinctly different hydrology and water clarity characteristics. Carrie, who is in her second year of studies, hails from Texas and with her strong accent and irrepressible personality, has managed to get some of us using the phrases 'howdy ya'll', 'fixinto' and my favourite 'jeetyet' (did you eat yet).

Damien Burrows, Barry Butler and **Richard Pearson** have obtained three-year funding to examine the tolerance of fishes to hypoxia (low dissolved oxygen) and to develop better water quality guidelines and monitoring protocols for dissolved oxygen. Hypoxia is probably (in our opinion anyway) the dominant water quality issue across most of northern Australia, but because of its enormous spatial and temporal variability, it is difficult to adequately describe its status in most standard water quality programs. In addition, there is very limited data on the tolerance limits of fishes. Preliminary work has already provided some very interesting insights into the topics including rather sharp thresholds separating survival from death.

ACTFR and colleagues at ERISS (Environmental Research Institute of the Supervising Scientist) have also just begun a two-year project on Tropical Rivers, funded through LWA, to inventory and classify the physical, biological and chemical features of freshwater habitats across northern Australia and the major pressures on them. GIS mapping and field-truthing of waterbodies will feature heavily in the work schedule.

From

Damien Burrows

EDITH COWAN UNIVERSITY

A small group of postgrads are gathering together at ECU to nut out the relationships between sedimentation, acidification, fire, organic soils and wetland ecology on the Swan Coastal Plain. **Jill Woodhouse** is halfway through her Honours and will be describing the invertebrate fauna of wetlands in terms of their response to acidification, investigating them through mesocosm work and targeting wetland habitats looking for key groups. **Caroline McCormick** is well into her Masters project looking at the factors that influence the combustibility of organic soils. **Bea Sommer's** PhD project on the effects of aeration and drying of wetland sediments on the iron, phosphorous and sulphur cycles has nearly reached that critical phase - end of lab work!

David Blake has just commenced his Honours and will be undertaking a risk assessment for organic soils and fire, and mapping the occurrence of organic rich sediments. **Pierre Horwitz** walks in ever decreasing circles, carrying his favourite old pair of weathered and stained sandshoes and mumbling to himself but has managed to convene, and edit proceedings of, an organic soils and fire workshop. **Michelle Cumbers** is in the latter stages of her Honours project, deriving a nutrient budget for eutrophic Lake Joondalup, in Perth, to assist in its rehabilitation. **Mark Lund** is currently on study leave at the Water Studies Centre at Monash University until the end of the year. Time spent away from teaching and administration is being devoted to publication, writing up some research projects, developing some new research projects and reading postgraduate draft theses. **Clint McCullough** has recently joined ECU as a Research Fellow with the Centre of Excellence for Sustainable Mine Lakes. He is completing his PhD looking at effects of elevated $MgSO_4$ salts from Ranger Uranium Mine on the aquatic biota of Magela Creek before it enters Kakadu National Park, and also beginning new work in the rather disparate field of acid mine void lake remediation in the south of Western Australia.

From

Clint McCullough

EPA Victoria Freshwater Sciences

EPA Victoria Freshwater Sciences has grown considerably over the last six months, with the addition of seven newbies, now swelling to 26 in all. **Adrian Dickson** joins us from the University of Canberra after doing time in Richard Norris's lab in Canberra. **David Kerr** brings an intimate knowledge of the Dandenong Amphipod to the unit since completing his honours at Monash with **Chris Walsh**, and a stint at WSL. **Steve Harfield** comes to us with great wisdom after several years at Water EcoScience, and is educating us on the finer points of surfing in the 70's.

Amber Perry completed honours last year with **Barb Downes** and **Vin Pettigrove** on bugs in and around Melbourne streams, concluding that surface roughness is an important feature in the success or failure of artificial riffles. **Peter Rose** mistakenly thought he'd find warmer climes in Melbourne, after completing honours on the interaction between landuse, river health and drought in streams around Armidale at the University of New England with **Andrew Boulton**. Perhaps unsurprisingly, Peter is often seen inappropriately dressed for the Melbourne weather, having learned his ways from Andrew!

Lisa Singleton hails from the UK with experience in environmental operations with the Environment Agency and is revelling in the experience of picking up Aussie aquatic bug taxonomy. **Paul Leahy** is experiencing similar grief, having vainly attempted to turn his back on his diatom (palaeo)ecology roots, but is pleased to report he quite enjoys the bug ID caper.

Leon Metzeling, John Dean, Ros St Clair, Dan Twikler and **Tanya Rankin** are working on a National Action Plan training and accreditation process, as well as undertaking auditing of field teams within and outside the EPA. **Dave Tiller, Anne-Maree Westbury** and **Clare Putt** have been working with Catchment Management Authorities to look at Ecological Risk Assessment as a tool for environmental decision-making. Meanwhile, the remainder of the crew are happily undertaking a range of projects, including the Bushfire Recovery Project, an Environmental Quality Objectives project on western Victorian lakes, and beginning the roll-out of the Sustainable Rivers Audit, amongst a host of other biological monitoring programs.

From

Paul Leahy

EnTox
(National Research Centre for Environmental Toxicology)

EnTox, the National Research Centre for Environmental Toxicology, is involved in researching the ecological and human health effects of natural and anthropogenic contaminants in the environment. The Centre covers a number of research areas, with the Natural Toxins Group, headed by **Dr. Glen Shaw**, currently working on freshwater and marine cyanobacterial (Blue-Green Algal) toxins and disinfection by-products in drinking water supplies. Glen is also toxicology program leader for the CRC for Water Quality and Treatment. The natural toxins group also shares a strong relationship with the Dept. of Natural Resources and Mines, and Queensland Health, Pathology and Scientific Services. Postgraduate students in the Centre are enrolled through Queensland University, Griffith University and Queensland University of Technology, and have strong links with other Australian and international universities.

The freshwater group currently has 8 postgraduate students. **Ian Stewart** has submitted his PhD Thesis on the recreational exposure to cyanobacteria and their toxins. **David Moore** and **Corrine Garnett** are both approaching completion of their PhDs on the role of akinetes in the life history of *Cylindrospermopsis raciborskii* and the effects of global warming on bloom formations respectively. David Moore is a finalist for the Young Water Scientist of the Year Award, giving a presentation at the International River*symposium* in Brisbane.

Peter Baine and **Philip Pope** are both into the second year of their PhDs. Phillip is involved in constructing a bacterial artificial chromosome library to help in the understanding of the genes responsible for cyanobacterial toxin production, while Peter is involved in gene expression profiling to identify the mode of toxicity.

We wish **Shiromi Wijesundara** well as she is set to complete her PhD Confirmation of Candidature in August, which involves research into the microbial degradation of cylindrospermopsin, a potent cytotoxin produced by *C. raciborskii*. **Marc Seifert** has recently completed his Confirmation of Candidature. Marc's project, a collaboration between EnTox and NRM's Aquatic Ecosystem Health Unit, is investigating the effects of cyanotoxins on aquatic organisms, both within and downstream of reservoirs.

David Ruebhart began his PhD in late 2003, and is developing fast and cost effective cyanotoxin bioassays for the Australian water industry. He will be working collaboratively with Marc Seifert on a number of sub-projects, bringing together ecological and environmental aspects of freshwater toxicology. **Carolin Neuman**, a visiting scholar from Germany, is looking at the toxicity of another cyanotoxin, deo-cylindrospermopsin, using mammalian cell lines. Research Fellow, **Dr. Wasa Wickramasinghe** continues his work on the removal of cyanotoxins from drinking water and methods for detecting trace amounts of cyanotoxins. **Dean Richards** is supporting Wasa's research into the identification and toxicity of disinfection by-products in domestic water supplies.

From

Marc Seifert and **David Ruebhart** **Further information visit:** http://www.entox.uq.edu.au

CENTRE FOR RIVERINE LANDSCAPES
GRIFFITH UNIVERSITY, BRISBANE

Prof. Angela Arthington has been appointed to membership of the Scientific Committee of the DIVERSITAS cross-cutting network on freshwater biodiversity for a period of three years. DIVERSITAS is an international scientific programme dedicated to the science of biodiversity under the auspices of ICSU, IUBS, SCOPE, IUMS and UNESCO. The Scientific Committee, chaired by Prof. Robert Naiman (University of Washington, USA), will define and implement an international scientific agenda on Freshwater Biodiversity (see http://www.diversitas-international.org). Angela also recently provided the entertainment for the first 2004 ASL Queensland Chapter's dinner/drinks and presentation night at Griffith University, where she presented an informative perspective on environmental flows with highlights of some of her insights gained from both Australian and South African rivers.

Nerida Beard, **Ben Stuart-Koster** and **Vourn Lutton** had a chilly visit to Cooper Creek in July to install water depth loggers in some key waterholes. Waterholes will be continuously monitored as part of the CRCFE Refugium Project to provide further insight into water retention throughout extended dry periods and connectivity between waterholes when there is flow. The rest of the refugium team had an earlier (not so cold) Cooper trip in June to sample fish and algal productivity to follow changes in waterhole productivity after the January 2004 flood. There is a return trip planned in October. The second Dryland Refugium Newsletter has recently been printed and provides an update of project activities in both the Cooper Ck and Warrego catchments. These can be obtained from the CRCFE Knowledge exchange team or from CRL at Griffith University. **Rick Cunjack** (visiting Professor) has returned to Canada happy to escape the Aussie wit and sarcasm, particularly from the refugium team. We believe he is keen to return in December after a few months of therapy.

Carol Conway and her large team of roving volunteers and some other CRL staff, including **Vourn Lutton** and **Kim Markwell** have been busy installing groundwater modelling wells for a Land and Water project (headed by **Christy Fellows**). The project is investigating the potential of riparian zones to reduce the delivery of excess nitrogen to surface waters, through their enhancement of subsurface denitrification. The wells are about 6m deep and are installed into the shallow groundwater table next to the stream. It is all done by hand and the team is beginning to get arms like Chinese swimmers.

Fiona McKenzie-Smith has departed after eleven years with CCISR/CRL, being the new Water Quality Scientist at SEQ Water. Fiona will be missed by the many students and staff that have benefited over the years from her ecological knowledge and experience. Fiona will still maintain her allegiance with us, as an Adjunct Research Fellow with CRL. **Vourn Lutton** will also be leaving us for a South American adventure for two months in October. We hope to see her getting muddy again when she returns.

From

Stephen (Harry) Balcombe

POSTCARD

Musings in a time of piece and quiet

I think I have mentioned it before, but work as a lone consultant comes in distinct seasons. January/February is quiet (every-one's on holidays), as well as July/August (every-one is waiting for a budget and work plan to be approved). This year is particularly quiet. I think it has something to do with the State Government releasing a White Paper (which had a green cover) which was a follow up to the Green Paper (which had a blue cover) on Water Reform. As the consultants salivate over the dollars that will follow, I think the Public Servants are now in shock - the "what do you mean you're going to implement it?" reaction. It will be a while before they decide what to do with their dollars, but in the meantime, things are quiet.

Rather than being disturbing, these are good times for a consultant. You can catch up on the reading - and always find just the perfect reference for that job that ended 3 months ago - do things around the house - but why would any-one decide to paint the house in winter, when it is the leaking bathroom roof that needs attention - and do some musing on things.

On poor old sand bed bugs!
I was trying to find information to do with a project looking at environmental flow recommendations for a sand bed stream. I was looking for any information that would help to decide on some flow criteria for producing a healthy sand bed bug fauna. Lots of references talk about it, but almost every one says things like sand bed fauna is "depauperate", sand is a "poor habitat" and only lousy bugs live there - even the national sampling strategy says don't sample sand patches because nothing of any value lives there (go find a riffle or an edge where you can catch lots and lots of bugs). Bunkum! It's not their fault that few species happen to be adapted to living in sand. Stop maligning those poor bugs.

On a single Google hit (Doh))
While doing a Google search for the information, I misspelt one of the keywords - an easily made and common spelling mistake (well, for me it is). Up came the Google message - only one hit! There it was, with the key word spellt wronly. Who could have done that? Open the link and ... well, guess which author spelt the keyword wrongly ... on the first page ... in the first paragraph? Mmmm, must proof read these things a bit more carefully in the future.

On the little red light!
Recently, we had cause to buy a new stereo system. The old one (from the 80's that occupied an entire bookshelf) finally blew a pfuffer capacitor and was going to cost the GDP of a small African country to repair (if they could find the parts that is).

The new one, about the size of a box of matches, with integrated multi-disc changer, tuner and tape deck (the kid in the store looked very odd when we asked about whether you could plug a turntable into it), was easy to set up. Attach the speakers (insert wire A into slot B), plug into the wall, and turn on.

The little red power light came on, things flashed and noise came out. Excellent. Works well. Now, how do you turn it off? Press the off button, the noise stops and ... the little red light stays on! You can't turn the thing off - it's always on standby. That makes 10 pieces of electronics in the house that has some sort of permanent power on signal - 2 clock radios, the powerboard surge protector, the answering machine, the work phone, the home phone, the video recorder, the microwave (time), the oven (which has the time, and a little glowing symbol that tells you you're not actually using the oven - just in case you are completely stupid), and the new stereo system.

According to a reputable source (OK, it was *The Inventors* on ABC), standby lights in Australia accounts for about 5 million tones on CO_2, about $500 million and something like 11% of power consumption (not sure what that actually includes though). Outrageous! They should do something about it!

On the beginning of the end for publications!

Speaking of reputable sources, I was looking through a few recent consultant reports and it struck me that the reference list is becoming a mirror of the internet availability of information - and a harbinger of the death of journals and refereed published papers. Any reference to information prior to the early 1990's is almost always from books or journal articles. From about 1995, there is a more equal mixture of journal articles and un-refereed reports downloaded from internet web sites. After 2000, almost everything is based on un-refereed reports (and those old classic references that every-one uses). The un-refereed references are not simply from internet sites with dubious content or opinion, but are the final reports of various research projects, consultant's reports and other documents from reputable funding bodies.

Now that funding bodies and research organisations are posting final project reports and consultant reports on their web sites, why would any-one wait until the formal refereed journal article came out? Within a month of the final report, you can gain access to the information - while the poor researcher must find unfunded time to write the paper, wait for the journal to referee it and then wait for the publication to come out.

And when you have the report in front of you, why pay to subscribe to the journal and wait to get the paper? But what happens if the paper is rejected as being fundamentally flawed? Well, nothing. Who will know? Will the researcher confess and have the report pulled? Would you? Even if they do, and the report is pulled, it is too late. The report is out there (and has been for years), been cited and used. So what is the future for refereed papers? Who knows?

On the war in Iraq!

The Daiquiri - Pour 50 ml rum, 12.5 ml freshly squeezed lime juice and 1 teaspoon sugar syrup into a shaker. Add lightly cracked ice cubes and shake thoroughly until the shaker becomes frosted. Strain through a mesh into a pre-chilled cocktail glass. After 5 or 6 of these, you do become a bit doddering, but nothing matters.

Tim Doeg

BILL WILLIAMS TRAVEL SCHOLARSHIP REPORT

I'm told Bill Williams presented his PhD research to an international audience overseas and found it a fantastic opportunity; he learnt heaps, met people who he remained in contact with and enjoyed it hugely. As the lucky winner of the **Bill Williams Travel Scholarship** last year, awarded to give a recent PhD student the same opportunity, I have to agree whole-heartedly. I went to the North American Benthological Conference in Vancouver in June, and came away invigorated, motivated and inspired (much, I suspect, to the present relief of John Whittington).

The conference was held at the University of British Columbia, which is surrounded by fir and conifer forest, juts out onto the water, and, once you look beyond the nudey beach (not hard given the predominantly elderly male demographic), has amazing views of British Columbia's convoluted coastline surrounded by seriously pointy snow-capped (!!) mountains. And I thought Hobart was good. So certainly an inspiring setting for a bunch of freshwater ecology boffins.

It got off to cracking start with a plenary talk by Jack Stanford on the potential for hyporheic upwelling zones as the basis for Pacific Rim food webs, and how much it pisses him off (his words, accompanied by thumping the podium) trying to secure funding for freshwater research. There were also plenaries by Catherine Pringle, on ecosystem linkages and consequences of human disturbance, George Grant on the need to reach better coupling between physical and ecological processes, and Colin Townsend on the ecological importance of disturbance.

It was a big conference, with around 800 delegates, which meant six sessions being conducted simultaneously and therefore picking your talks wisely so you can see the best ones and not have to run between lecture theatres. Luckily for me, I didn't have to sit in on special sessions and had complete freedom to go to whatever talks I wanted, so it was all food webs, community ecology, trophic links and subsidies, hydrological connectivity, habitat heterogeneity, I could go on, but basically all that delicious ecological concept stuff! John Gooderham called it eco-porn, rots your brain; he was clearly jealous.

But no matter how you try to work it out, the three talks you most want to see are always, always, on at the same time, and it's always, always a tough decision. Then there were the talks you'd been hanging out to see, because you've read so much of their stuff, and maybe your expectations were a touch too high (anyone who knows me will be shaking their heads at me I'm sure). But then, also like every conference, there were the surprise hits, the great talks by people asking good questions and making it all look so simple and clear. That's the inspiring stuff.

And in amongst all these American accents ("neat huh?"), there was a handful of Australian and New Zealand talks - I don't care what anyone reckons, I think we do excellent research. We ask broad ecological questions. Talking later with Peter Davies about this, he suggested it's because there's fewer of us, so we try to cover more ground and we collaborate. That's the motivating stuff.

So I'd like to say how grateful I am to ASL for this opportunity, for a brilliant conference, for exposure to an international audience (and it was good exposure too, I got some great feedback on my research), and confirmation of lucky I am because I get to muck about trying to figure out how rivers work!

Danielle Warfe
Senior Aquatic Ecologist (NAP Environmental Flows)
Department of Primary Industries, Water and Environment
Tasmania

A BIT OF FUN ~ KEEP THOSE LETTERS COMING !!

Dear Onmil

There's an election coming up, and I want the limnology vote. What should I do?

J. Howeasy

Dear J.

Unfortunately, as a politician, you realised a long time ago that non-humans don't vote (although some politicians get close....)! So, you're probably not all that interested, really.

However, limnologists are human (well, most of them) and they vote. Consider this quick quiz:-

1. Have you, or any of your party, ever considered adequate funding for limnology at universities and other research institutions?
   a. What do you mean? It's adequately funded now
   b. Trust us - we will fund it adequately in the future (keep fingers crossed)
   c. Well, we considered it for all of two minutes and then decided to spend the money on winning gold at the Olympics
   d. What's limnology?

2. Is limnological information adequate?
   a. It must be, we've spent all this money on it
   b. Trust us - it'll be better in the future (keep fingers crossed)
   c. If we get more information, it might mean we find out how bad it really is
   d. What's limnology?

3. What's the best way to improve the health of aquatic ecosystems?
   a. Give water rights to farmers
   b. Trust us - it'll be better in the future (keep fingers crossed)
   c. Give money to farmers
   d. What's limnology?

If you nodded your head at any of the above, it's just barely possible that some limnologists might not vote for you. But, due to circumstances within your control, there aren't that many of us. So, don't worry, it might not even be noticed how aquatic ecosystems deteriorate in three years! Especially if you don't bother funding limnology.....

Sincerely

Onmil

(Editors Note: a few members have asked how to contact Onmil, please email me and I'll pass on your request). Ask Onmil all the tricky limnological etiquette questions you really want answered.....

ASLO 2005 ANNOUNCEMENT

In February 2005, the spring meeting of the American Society of Limnology and Oceanography (ASLO) is in Salt Lake City, Utah. The meeting is supported by The Nature Conservancy, the Geological Society of America, and the North American Benthological Society, and thus the organizers are hoping to bring together aquatic scientists from a variety of backgrounds to stimulate and promote scientific discussion. See the ASLO website (http://aslo.org/meetings/slc2005/) for more information on the meeting

Emily Stanley and Durelle Scott are organizing a session titled: "Riverine-floodplain Interactions: Groundwater-surface Water Interactions". We are hoping to bring together scientists working within floodplain environments, studying process including floodplain hydrology and nutrient biogeochemistry. We are encouraging submissions at a range of spatial scales, from individual floodplains to larger basin-scale investigations. Please consider submitting an abstract to this session. Contributions can be made in the form of oral talks and posters. The submission deadline is 1 October, 2004, and we look forward to sharing ideas in February 2005.

TS37 - Riverine-floodplain Interactions: Groundwater-surface Water Interactions

"The flow of material into and out of floodplains where the downstream receiving waterbody is affected by water quality issues such as eutrophication, is of considerable interest in regions of North America and the world. The altered redox gradients within floodplain environments provide a "biogeochemical hotspot," a zone for potentially high biogeochemical processing. This session will be designed to bring together limnologists, ecologists, and hydrologists to examine the interactions between floodplains and the associated river channels. Presentations that range from site-based study at the kilometer scale looking at the transport of both water and solutes between the river-floodplain, to larger scale examination of floodplain interactions within entire river networks are encouraged."

Plenary Topics and Speakers:

* *Patterns of Diversity in Aquatic Systems*; Presented by Matt Liebold, University of Texas
* *Geomorphological Linkages Between Rivers and Watersheds, Linkage to Salmon*; Presented by Dave Montgomery, University of Washington
* *A Coherent Future Ocean Policy for the United States*; Presented by Christophe Tulou, Center for Sea Change
* *Eutrophication Across Aquatic Environments*; Presented by Nancy Rabalias, Louisiana Marine Science Consortium
* *Stirring in Aquatic Ecosystems*; Presented by Dave Siegel, University of California, Santa Barbara

Cheers,

Durelle Scott, U.S. Geological Survey, dtscott@usgs.gov and Emily Stanley, University of Wisconsin, ehstanley@wisc.edu

Centre for Riverine Landscapes
Research Training and Scholarships

The Centre for Riverine Landscapes brings together some of Australia's leading river and catchment scientists in a coordinated program of research activities and related postgraduate training. The Centre's five research programs have been developed around significant R&D and management issues: Water Allocation and Environmental Flows; Land Management; Biodiversity and Conservation; River and Riparian Rehabilitation; and Ecosystem Health Assessment. Further details of research programs and specific staff research interests and publications are available on our website (www.griffith.edu.au/centre/riverlandscapes).

The Centre offers the following scholarship opportunities for Research Higher Degree (Masters and PhD) and Honours students in 2004/2005:

- APAI PhD scholarship on microalgal ecology in drinking water reservoirs and the role of nutrients (available immediately) ($24,000 p.a. for 3 years), Dr Michele Burford.
- Griffith University PhD scholarship on microbial processes of freshwater ecosystems and the impacts of pollutants (available immediately) ($18,500 p.a. for 3 years), Dr Peter Pollard.
- Summer research scholarships (up to 5 @ $4,000) for undergraduates at 2nd or 3rd year level.
- Stipends for Honours students (up to 5 @ $4,000).
- PhD top-up stipends (up to 2 @ $6,000 pa for 3 years) for scholarship holders enrolled at Griffith University.

Postgraduate students receive significant support for field and laboratory research and funding for conference travel is also available. The Centre offers a range of well-equipped laboratories for microscopy, soil and sediment research, population genetics and DNA analysis, aquatic chemistry and microbiology, plus wet and dry-sample processing areas. It also maintains several 4-wheel drive vehicles and a large array of field sampling and camping equipment.

For further information, please contact the Director on:
Tel: (07) 3875 7402 Fax: (07) 3875 7615
E-mail: L.Shaw@griffith.edu.au

Postal: Centre for Riverine Landscapes
Nathan Campus
Griffith University
Nathan QLD Australia 4111

INFORMATION FROM AND FOR MEMBERS

Please Refer to the ASL Website Updates / Newsflash! Section

CALL FOR NOMINATIONS

The Fisheries Scientific Committee (FSC) was established under Part 7A of the *Fisheries Management Act* 1994. The Committee evaluates threatened species, populations or ecological communities and key threatening processes in NSW waters for listing in the government schedules. Such listings require that NSW agencies address the environmental problems that prompted the listing.

The Committee can consider all fish (freshwater, estuarine and marine), invertebrates (e.g. marine snails, dragonflies, molluscs) and marine plants (e.g. seagrasses, mangroves, algae). The FSC seeks information regarding species, populations or ecological communities that may be potentially endangered by anthropogenic causes.

Nominations to amend the threatened species Schedules can be lodged by any person or organisation. Nomination forms and more information can be obtained from the Committee's web site at www.fsc.nsw.gov.au.

Nominations should be forwarded to:

Fisheries Scientific Committee
Attention: Executive Officer
c\- NSW Department of Primary Industries
Locked Bag 1
NELSON BAY NSW 2315

For further information contact: Kylie Russell on (02) 4916 3817.

Water Account for Australia
ABS has finally released a new Water Account for Australia. Find it at http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/Lookup/5469708047B0C960CA256E980079E54C/$File/46100_2000-01.pdf

A summary can be found at:
http://www.abs.gov.au/Ausstats/abs%40.nsf/1020492cfcd63696ca2568a1002477b5/a7f8ae8188119911ca2568d40004eaf7!OpenDocument

New Chief Executive for Murray-Darling Basin Commission
Dr Wendy Craik has been announced as the new Chief Executive for the Murray-Darling Basin Commission (MDBC). Dr Craik's initial appointment is for five-years and began in August. Dr Craik brings valuable skills and qualities to the position of leading the MDBC, particularly with her considerable expertise and experience in natural resource management and managing intergovernmental bodies.

Currently the President of the National Competition Council (NCC) and Chair of the Australian Fisheries Management Authority (AFMA), Dr Craik succeeds Mr Don Blackmore who retired as MDBC Chief Executive on March 29 this year and Mr Kevin Goss who has acted in this position since then. Kevin Goss has take up the Perth-based, CEO position of the CRC for Plant Based Management of Dryland Salinity see www.crcsalinity.com.au

Land & Water Australia moved on 29 June 2004
After 5 years in the Unisys Building, 91 Northbourne Ave, Turner ACT, Land & Water Australia has moved.... but not very far...

New physical address is:
Level 1, Phoenix Building
86 Northbourne Ave
Braddon ACT 2612

New phone and fax numbers are:
Switch 02 6263 6000
Fax 02 6263 6099

Postal address remains as: GPO Box 2182 Canberra ACT 2601

Water Innovation Network (WIN)
This is a monthly email, which provides a service of events, contacts, issues and research information within the water industry. Please email your contact details to Melani Koerber at m.koerber@aitec.edu.au, Phone (08) 8232 9688, if you would like to subscribe.

National Threatened Species Day
The Threatened Species Network would like to encourage everyone to take part in National Threatened Species Day on 7th September.

Each year, National Threatened Species Day (NTSD) is held to raise awareness of the plight of our more than 1500 Australian native species and ecological communities at risk of extinction. Held on the date in 1936 when the last known Tasmanian Tiger died in captivity at Hobart Zoo, NTSD is the gateway to Biodiversity Month, which runs for the entirety of September.

Throughout September, activities are run across Australia including field days, presentations, displays, surveying, monitoring and planting. These events are used not only to help raise awareness of threatened species issues, but also to help celebrate the work done across the country to help address these threats.

Bugs invade library

The National Library's Visitor Centre will be alive with insects from 6 August 2004 until 6 February 2005 when CSIRO and the National Library join forces to display the magnificent diversity of Australia's natural history. 'Theatre of Insects' an initiative of well-known Canberra artist and scientific illustrator, eX de Medici, is a remarkable and colourful array of insect specimens from the Australian National Insect Collection (ANIC) and items from the National Library's collection.

Codes for Australian Aquatic Biota

CAAB - Codes for Australian Aquatic Biota - is a continuously maintained and expanding 8-digit coding system for aquatic organisms in the Australian region maintained by CSIRO Division of Marine Research. Initially developed to cover fishes and selected other organisms of research or commercial interest, it has more recently been expanded to provide more comprehensive coverage of a number of aquatic groups, as information is available. CAAB is used by a large and expanding number of governmental and industry groups for marine biology and fishery purposes and has replaced almost all other national and locally designed coding systems.

For a draft list of standard names of Australian fishes visit http://www.marine.csiro.au/caab/

Sorting and Classifying Grants

The Australian Biological Resources Study (ABRS) is a program within the Department of the Environment and Heritage. It offers financial support to postgraduate students in Australia to travel to a national or international conference relevant to both the student's research programme in systematics or taxonomy, and the aims and objectives of the ABRS. Further information and nomination forms can be found on the Department of Environment and Heritage website. The closing date for the next bursary round is 10 September 2004.

2004 World Water Week Stockholm

Three JAPANESE students have won this year's STOCKHOLM JUNIOR WATER PRIZE. Tsutomu, Daisuke and Kaori developed an environmentally friendly, organic fertiliser as an alternative to commercial fertilisers to minimise contamination of groundwater, being caused by commercial fertiliser use. Groundwater is the sole source of drinking water for the island of Miyakojima. (Website)

Professors Sven Erik Jorgensen, Denmark, and William J. Mitsch, USA, both experts in the dynamics of wetlands received the 2004 Stockholm WATER PRIZE from King Carl XVI Gustaf of Sweden during a Royal Banquet & Ceremony on 19 August. (Website)

Murray-Darling Basin Commission -E-letter

The Murray-Darling Basin monthly e-letter reports on happenings across the Basin. Contributions are welcome. Please send items (no more than 150 words) to the editor at leone@netspeed.com.au An online html version is available at: http://www.mdbc.gov.au/commcentre/elist/eletter/eletter_menu.html

Ramsar's Coordinating Committee for Global Action on Peatlands meets in Tampere, Finland

During COP8 in 2002, the Ramsar Contracting Parties formally recognized that "peatlands are a vital part of the world's wetland resources" as well as their "importance to the maintenance of global diversity and for the storage of water and carbon, which constitute a function vital to the world's climate system". Through Resolution VIII.17 they adopted detailed "Guidelines for Global Action on Peatlands" (cf. Ramsar Handbook 14, downloadable from www.ramsar.org/lib_handbooks_e.htm).

In 2003, the Ramsar Secretariat established a Coordinating Committee for Global Action on Peatlands (in short CC-GAP) to prepare an implementation plan for global action on peatlands. The open-ended Committee consists of peatland experts representing interested Contracting Parties, Ramsar's Scientific and Technical Review Panel (STRP), the International Mire Conservation Group (IMCG), the International Peat Society (IPS), Ramsar's International Organisation Partners and other NGOs, the private sector and other bodies, including the secretariats of the Convention on Biodiversity and of the UN Framework Convention to Combat Climate Change.

The CC-GAP held its initial meeting in the Netherlands (Wageningen, 5-6 November 2003) with generous support from the Global Peatland Initiative (with a grant from the Dutch Ministry of Foreign Affairs, DGIS). The Committee convened again on 6 June 2004 in Tampere, Finland, back-to-back with the 12th International Peat Congress (cf. below). It aims to finalise a draft implementation plan for global action on peatlands before the end of 2004.

Ramsar Contracting Parties are requested to provide information on their actions to "ensure the conservation and wise use of peatlands as a demonstration of the ecosystem-based approach under the Convention" as part of their National Report under Operational Objective 3.2 (cf. the detailed format at www.ramsar.org/cop9_nrform_ready_e.htm). Input by Contracting Parties is essential to report on progress in implementing the Guidelines for Global Action on Peatlands, including recommendations on future priorities to be prepared for Ramsar COP9.

The CC-GAP prepared a work programme for elaborating the report and recommendations to be submitted to COP9. To this end, it will be supported by the Global Peatland Initiative's secretariat and steering committee, as well as, hopefully, by a number of additional peatland specialists of Ramsar's STRP and from specific Contracting Parties. A draft implementation plan and recommendations will be available prior to the next meeting of the CC-GAP, scheduled for 11-12 October 2004 in the Netherlands.

Specific recommendations for COP9 will be focusing on the regulatory and natural functions of peatlands (in relation to climate change, water resource management and biodiversity), their social and cultural values (peatlands for people and poverty alleviation) and their production values (peatlands and agriculture, forestry, energy production, infrastructure development pressures). If you wish to receive the draft document for comment, please contact the Ramsar Secretariat: salathe@ramsar.org

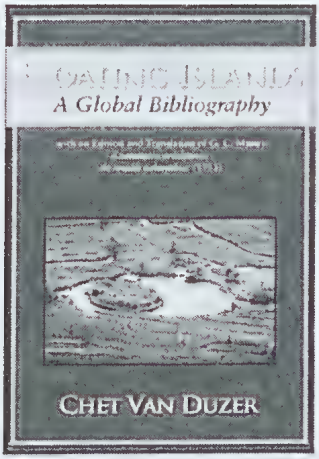
In Tampere, the International Peat Society (IPS) pledged to look into the possibility of supporting, with expertise and financial means provided by its members, the further work and October meeting of Ramsar's CC-GAP to finalise the report and recommendations for COP9. IPS is the major global organisation of scientific, industrial and regulatory peatland stakeholders. It is dedicated to fostering the advancement, exchange and communication of scientific, technical and social knowledge and understanding for the wise use of peatlands and peat (more on IPS at www.peatsociety.fi). It is anticipated that the promised support by the IPS will provide a real boost for the implementation of the Ramsar Guidelines for Global Action on Peatlands in the preparation of COP9 and well beyond. Hopefully, this will be complemented by renewed support to the Global Peatland Initiative by the Dutch Government (via its Alterra institute), thus illustrating an efficient "public-private-partnership".

The 12th International Peat Congress held in Tampere from 6-11 June under the theme "Wise Use of Peatlands", with the participation of more than 500 experts, provided a timely overview on peatlands issues worldwide, such as mire ecology and pristine landscapes, peatland forestry and agriculture, use of peat for horticulture and power generation, restoration of peat production sites, balneological use of peat and ecotourism in peatlands. For more inspiration, visit www.ips2004.com

A specific round table meeting during the Congress focused on the "Wise use of tropical peatland", organised by professor Jack Rieley, vice-president of IPS and a member of Ramsar's CC-GAP, with support by the Indonesian Government. After introductions on Ramsar's Wise Use approach for wetlands and the wise use guidelines for peatlands elaborated by IPS and IMCG (cf. our news item on their launch at COP8 www.ramsar.org/w.n.peatlands_manual.htm), Bambang Setiadi, from the Indonesian Ministry of Research and Technology, Suwido Limin, from the Centre for International Cooperation in Management of Tropical Peatland in Indonesia, and Mohamed Murteza of the University of Malaysia in Sarawak, illustrated the serious problems created by inappropriate land development in tropical peat swamp forests leading to farming failure, social conflict, flood disasters and air pollution health hazards provoked by peat fire haze. An EU-funded research project (cf. www.strapeat.alterra.nl), focusing on the problems of Borneo's peatlands, is currently trying to find ways to alleviate the disastrous consequences of earlier, ill-fated development projects, such as the mega rice project in central Kalimantan.

To contribute information about your own activities for the implementation plan on Global Action for Peatlands, please contact the Ramsar Secretariat at salathe@ramsar.org.

Article submitted by Max Finlayson



Floating Islands: A Global Bibliography
with an Edition and Translation of G. C. Munz's *Exercitatio academica de insulis natantibus* (1711)
by Chet Van Duzer [ChetV@aol.com]

This book is a unique treasury of information about one of nature's marvels: floating islands. The bibliography contains more than 1500 citations of books and articles in twenty languages on the subject; the entries are annotated and cross-referenced, and there are both thematic and geographic indices.

All aspects of floating islands are addressed, including the formation of floating islands, the causes of their buoyancy, their role in the ecology of lakes and wetlands, their flora and fauna, their role in the dispersal of plants and animals, and methods for controlling and managing them. Works are also cited on artificial floating islands used for agriculture, human habitation, wildlife habitat, and improvement of water quality; and floating islands in literature, myth, and legend.

The book includes the text and an English translation, with detailed notes, of G. C. Munz's rare 1711 thesis on floating islands, *Exercitatio academica de insulis natantibus*, as well as photographs of several floating islands.

Hardcover, 27 cm, 427 pp. with indices and 24 illustrations.
ISBN 0-9755424-0-0; Library of Congress Control Number: 2004093899

Forthcoming from Cantor Press (September 2004)
http://www.cantorpress.com/floatingislands/

FASTS

Australian Academy of Science - 7 June 2004

The Australian Academy of Science is currently carrying out a project entitled "Maximising the benefits from Australia's international scientific linkages". The project is funded under the ARC's Learned Academies Special Projects Scheme.

The project aims to assemble an inventory of significant international research programs in which Australian scientists might reasonably be expected to be involved. This will allow Australia's current participation to be set against the wider set of opportunities for international engagement. The project will evaluate mechanisms that enhance Australian scientific involvement in international programs, including the mechanism of subscriptions to international scientific organisations. The planned outcomes are to ensure more targeted investment in areas of national priority and increased leverage of international scientific resources for the benefit of Australia.

The purpose of the project is to:

(1) Assemble an inventory of significant international research programs and collaborative opportunities in which Australian scientists might reasonably be expected to be involved;

(2) Describe the aims and objectives of those research programs, the sponsoring bodies and involved governments and countries, and the progress and outputs to date;

(3) Map the extent to which Australia is currently engaged in these programs and the benefits that flow from that engagement;

(4) Assess the nature and extent of any gap between current participation in international scientific programs and potential opportunities, with a particular emphasis on the National Research Priorities; and

(5) Evaluate mechanisms to enhance Australian scientific involvement in international scientific programs, including the mechanism of subscriptions to international scientific organisations.

Attached is a first draft of an inventory of significant international research programs, with some information on Australia's involvement in each program. We are seeking your input and advice to complete the table and fill in any blanks. Specifically:

1. Are there any significant international research programs that your society is involved in that are not listed in the tables?
2. Are the details of your society's involvement in various programs correct?
3. If your society pays membership subscriptions to an international body, can you tell us what level you pay, and how the level is determined?
4. Can you describe the benefits arising from your society's involvement with the international bodies/programs?

5. Are there international programs that your society would like to be involved in, but do not have the funds
6. Any other relevant information?

Any information you could provide would be gratefully received
Chris Warris
Australian Academy of Science
GPO Box 783, Canberra ACT 2601
ph (02) 6247 0724, fax (02) 6257 4620

Science Meets Parliament – 7 June 2004

Executive have decided to postpone SmP which was scheduled for August due to uncertainty around the election date and concern that we would not get good value for the event in August if all politicians are completely focused on the unofficial election campaign. It is possible we will hold it at the end of November but it is likely we will hold a 04/05 SmP in March. Further details, including dates for the Annual Council Meeting will be forthcoming shortly.

Senate Inquiry into the Office of the Chief Scientist
Please find attached a copy of FASTS submission to this inquiry (which will be on the FASTS website once it is placed on the Senate's website). FASTS policy position is that the Chief Scientist should be a full-time position and the submission expands on that and other related matters.

Senate Inquiry into the Free Trade Agreement
Please find attached a copy of the FASTS submission (which will be on the FASTS website once it is placed on the Senate's website). This expands on our previous submission to the Joint Parliamentary Committee on Treaties. A key point in our submission is the lack of constraints or oversight on US firms cherry-picking promising Australian R&D intensive SMEs.

Measuring Excellence
A note from the AAS about a forthcoming symposium. Given the Government's intention, announced in BAA2, to examine a range of quality measures over the next two years, and the possibility of their applicability for resource allocation, this is timely.

The 'Measuring excellence in research and research training' symposium to be held at The Shine Dome, Canberra, on 22 June 2004 will focus on reviewing current approaches to the measurement of excellence in research and research training and identifying options for improvement. Register now to:

- Hear whether a light touch UK-style research assessment exercise might be implemented in Australia.
- Find out what industry thinks is excellent in research.
- Hear views from all four Learned Academies.
- Have your say in a breakout group.

Registration form and program are at http://www.science.org.au/conferences/researchexcellence. The symposium is being organised by the National Academies Forum.

Gaps/overlaps in Commonwealth/States jurisdiction
Many thanks for the many contributions I have received on this topic - clearly this has touched a few raw nerves !

Regards
Bradley Smith, Executive Director

Media Release 07/04 - 15th June 2004
FTA risks US cherry picking of Australia's most promising technology firms

FASTS has warned the AUS-US Free Trade Agreement (FTA) undermines the long term capacity for Australia to benefit from commercialisation of publicly funded R&D. The President of FASTS, Professor Snow Barlow said provisions liberalising foreign investment make it easier for US firms to simply cherry-pick Australia's most promising and innovative technology firms. "There is a real threat the FTA will result in jobs, production, R&D capacity and export opportunities being taken offshore. The problem is the FTA significantly reduces the capacity of the Government to exercise control of foreign takeovers or apply conditions that will deliver benefits to Australia".

"The two key provisions are;

1) the FTA prevents the Government making technology transfer and domestic content requirements a condition of investment in firms that grow out of publicly funded R&D grants and subsidies; and
2) the raising of the investment threshold from $50m to $800m for manufacturing firms means the Foreign Investment Review Board (FIRB) could not examine proposed takeovers of the vast bulk of R&D intensive, small, medium enterprises (SMEs).

"The ban on technology transfer and domestic content requirements as a condition of R&D grants seriously constrains the existing 'national benefits test' for industry R&D programs including *R&D Start* and *Commercialising Emerging Technology* (COMET)".

"These bans will also adversely constrain the capacity of a future Government to implement 'national benefits' criteria to other publicly-funded R&D programs such as the ARC, Universities and NHMRC. By way of contrast, the United States maintains strict controls on firms commercialising intellectual property (IP) derived from publicly-funded R&D. These include requirements that licenses of IP created from federal funds can only be awarded to firms who will substantially manufacture in the US and significant constraints on foreign takeovers or attempts to take manufacturing offshore."

"Clearly, the FTA is not consistent with a key focus of Backing Australia's Ability to maximise the capacity of Australian small and medium-sized businesses to take innovative ideas to the market", concluded Professor Barlow.

FASTS Submission to the Senate FTA inquiry is available at http://www.fasts.org, Media inquiries to Bradley Smith 0408 511 261.

New CEO of the ARC - 22 June 2004

Minister Nelson announced the new CEO of the ARC on 22 June. His Press release follows:

"Today I am announcing the appointment of Professor Peter Høj to the position of Chief Executive Officer (CEO) at the Australian Research Council (ARC). Professor Høj will commence a five year term from 1 October 2004 and has been recommended by the ARC Board as an outstanding candidate for this vital position. This assessment was made following national advertising and an extensive executive search involving major ARC stakeholder consultation.

Professor Høj was educated at the University of Copenhagen majoring in Biochemistry and Chemistry. He has a Master of Science Degree in biochemistry and genetics and a PhD in photosynthesis. Professor Høj has received fellowships from Denmark and Australia for post-doctoral studies in biochemistry. Since arriving in Australia in 1987 he has worked as a Lecturer & Senior Lecturer in Biochemistry at La Trobe University and Professor of Viticultural Science and Oenology at the University of Adelaide. In 1992 he was awarded the Boehringer-Mannheim medal by the Australian Society for Biochemistry and Molecular Biology.

Since becoming Managing Director of the Australian Wine Research Institute in 1997 he has implemented a cross-disciplinary approach to strategic research and development. The success of the Institute was recognised by an Australian Wine Industry Award in 2002. Professor Høj is also a shared recipient of the SA Great Award (2002), Science category, for the National Wine Industry Research Cluster Pty Ltd establishment, and the Centenary Medal (2003) for service through wine research and science.

Professor Høj has extensive experience as a member of various science and research committees, including the Steering Committee for the McGauchie Review in 2003 on collaboration between universities and publicly funded research agencies and the Prime Minister's Science, Engineering and Innovation Council. Professor Høj is an exceptional candidate for the position. A researcher of international renown, he also brings to the ARC considerable experience in contemporary management and strong strategic leadership. I congratulate Professor Høj on his appointment and look forward to working with him as he leads the ARC in its efforts to achieve the highest quality research outcomes and economic and social benefits for the Australian community."

2005 Round for Fellowships and ARC Centres of Excellence Opened - 20 July 2004

The Minister announced on 20 July, that applications for 2005 Federation Fellowships and ARC centres of excellence have opened. Applications for Fellowships close on 15 October 2004. For more information on these and the Centres of excellence visit http://www.arc.gov.au/

Regards,
Bradley Smith
Executive Director, FASTS

The Australian - Higher Education Supplement 28 July 2004 (page 34)
"Acid Test For Science Publishing", by Professor Snow Barlow, President FASTS

"'Serial killing' is now a routine part of academic life. Each year university libraries make tough choices as to which journals will be removed from the subscription list. The reasons are straightforward. The cost of academic journals has been increasing far in excess of library funding and changing pricing policies of major academic publishers toward 'bundling' content has put great pressure on libraries' capacity to buy journals best suited to institutional needs.

Academic publishing has become a highly profitable global business as nations seek knowledge economies through investment in science and innovation. Digitisation and communications technologies have transformed scientific publication with on-line access, archiving, search and retrieval the norm, not paper copies. This technology has also enabled a backlash against mainstream publishing with the emergence of various 'open access' and 'author-pays' models based on free online access.

As Governments invest more in R & D they are developing a fundamental interest in ensuring effective dissemination of knowledge and efficient access to intellectual property. An important 1997 OECD report, National Innovation Systems, argued knowledge distribution was at least, if not more important, than knowledge production in a knowledge economy.

These dual pressures have attracted the interest of the UK Parliament and this month the Select Committee on Science and Technology released a report - Scientific Publications: Free For All? - examining the scientific publishing industry.

The reports' key conclusions include:

- Provision of scientific journals are not satisfactory due to publisher pricing policies and inadequate library budgets;
- The practice of large publishers exercising market power by bundling content to be sold as 'the big deal' to academic libraries is constraining libraries and having a negative impact on smaller publishers;
- The market for scientific publications is global -the UK cannot act alone.

- Rigorous quality assurance through independent peer review of all disseminated research is central to the integrity of scientific publication and research whatever publishing models are used.
- While there is insufficient understanding of how new open access and author-pays models will operate, they warrant further experimentation.

None of this is surprising. Australian university libraries - who spent $120 million on journal subscriptions and licences in 2002 - have been at the international forefront grappling with many of these issues. They have been developing collaborative strategies to deal with the pressures of inadequate funding, vagaries of exchange rates, publisher's pricing policies and changing research needs for some years due to economic necessity.

The real significance of the UK report is less to do with any specific recommendations but more the strong case it mounts that Governments have an imperative to take a stronger strategic and funding role in scientific publishing. This argument will reverberate through publisher boardrooms, funding agencies, departments and Governments around the world.

If Governments do take an assertive role in scientific publication markets it is likely they will be more interested in cost effectiveness, efficiency and how they might use their market power to bring about competitive pressure on prices rather than differences between traditional 'user pays' models and emerging 'author-pays' publication models.

For researchers, the key issues are access and the integrity and quality of publications rather than which business model(s) thrive.

Digitisation and ICT has led to an explosion of information but sorting the wheat from the chaff is a real issue. For all its faults, peer review remains the best quality control system and researchers will be rightly wary if some 'open access' models undermine peer review.

In many respects scientific publication is a perverse market. They are an essential resource for scientific research and publication of journal articles is intimately bound up with the practices, rewards, prestige, and recognition of scientific research. Publications, citations and impact measures are routinely used by Governments, funding agencies and institutions in resource allocation around the world with real 'quantity/quality' consequences.

Emerging changes in scientific publication practices are elements of far broader transformations in scientific research. Traditional disciplinary based research, with its 300 year synergistic relationship with academic journal publications, is being supplemented by new modes of knowledge production based on trans-disciplinary, problem based research with more informal networks of collaboration and dissemination and somewhat less reliance on traditional academic articles.

The UK Government report has picked up on elements of these changes and its implications for research infrastructure and library resourcing.

In my view, scientific researchers collectively have not been particularly reflective about the profound changes in the organisation of research and knowledge production. In many respects we have been passive functionaries too often whinging about the present or harking back to a (mythical) past rather than examining critical meta-research issues of organisation and governance of science. What are the role and prospects of disciplinary-based societies? How do we represent ourselves? How do we represent and engage with community interests and concerns? Indeed, what is a scientist and how do we select them?

Scientific researchers have a strong interest in thinking these questions through and promoting relevant organisational and governance models. Changes in publication and dissemination practices and needs are important elements of this more crucial challenge."

ALP on R&D Investment

In an announcement made by Mark Latham, he has committed the ALP to lifting Australia's investment in R&D to OECD levels by 2015.

The quote from his speech at the AMWU conference 30 July 2004 is:

"Under the last Labor Government, R&D investment grew by 10 percent per year for a decade. The Howard Government has neglected R&D and venture capital, so that the rate of investment has now fallen below its 1996 level. Most companies in Australia spend more on their electricity bills than they do on research and development. Few collaborate with the public research institutions and, quite frankly, this is just unacceptable in an advanced industrial economy. This is why Labor is committed to meeting OECD levels of research investment by the year 2015. Currently we are just two-thirds of the OECD average. We've got to lift up and Labor's plan is to lift up to the OECD level by 2015."

There were no details on a strategy to meeting this target.

Cheers,
Bradley Smith, Executive Director

Dates for FASTS' SmP and Annual Council Meeting - 3 August 2004

Science meets Parliament
Please be advised that the 2004/5 'Science meets Parliament' will be held in March 2005.

The exact dates cannot be determined until the Parliamentary sitting schedule for 2005 is announced (which is typically done in November) but is likely to be in either the first or second week of March.

By holding it in March the election will be well and truly over, politicians and their staff would have had a break and everyone will be much more receptive to good ideas and forward thinking.

Incidentally, Ken Baldwin - Chair of FASTS policy committee and originator of SmP - has been nominated for the *Eureka Prize for promoting the understanding of science* for 'Science meets Parliament'. The Eureka awards - Australia's foremost science prizes - are announced on August 10th and I am sure we all wish Ken good luck.

Annual Council Meeting

The AGM of the FASTS Board and the Annual Council Meeting will be held on Wednesday 24th November in Canberra. I would urge all members to ensure their organisation is represented at the Annual Council meeting. I would also like to draw to the attention of Members that the FASTS President-elect for the 2006-7 term will be voted in at the AGM of the FASTS Board on the 24th.

Regards,
Snow Barlow
President

Chief Scientist Report and FASTS Media Release - 6 August 2004

"Yesterday the Senate Inquiry into the Office of the Chief Scientist tabled their report (report available at http://www.aph.gov.au/Senate/committee/eet_ctte/reports/index.htm and go to general inquiry reports, references committee.

Comments, recommendations and FASTS Media release are below.

The Majority Report (signed by Senator Kim Carr (ALP) and Senator Natasha Stott Despoja (Democrats) argued:

- There was no evidence that Dr Batterham had behaved inappropriately or improperly as Chief Scientist.
- The public interest is not being served as long as the perception of a conflict of interest remains and is not properly managed.
- That the appearance of a conflict of interest has undermined public confidence in the Office of the Chief Scientist.
- Accordingly, it recommends restoring the position of Chief Scientist to a full-time appointment under public service conditions as a matter of importance and sound public administration.

FASTS were clearly influential in the report and are widely cited in both the Chair's report and the Democrats supplementary report. The Minister also quotes FASTS in his media release on the Senate report. (Well, we are independent and non-partisan ...)

The Report made four recommendations.

FASTS strongly endorses the recommendation that the position be made full time although our rationale goes to the importance of science advice to Government rather than addressing conflict of interest issues (as that still exists whether the position be full or part time). We would prefer the position be statutory rather than a PSA position

Recommendation 1
The committee recommends that the conflict of interest guidelines included in the Australian Public Service Code of Conduct should be reviewed to ensure that the broader conflict of interest concepts examined in this report can be addressed more transparently and rigorously.

Recommendation 2
The committee recommends that in view of the responsibility and potential workload attached to the Office of the Chief Scientist, and in the light of the potential for conflict of interest associated in particular with a part-time Chief Scientist, the position of the Chief Scientist should be full time.

Recommendation 3
The committee recommends that guidelines, codes of conduct and procedures on dealing with potential and actual conflicts of interest, applying to holders of public office in the Australian Government, should be similar and consistent across all government agencies and bodies.

Recommendation 4
The committee recommends that the position of Chief Scientist should be appointed under public service conditions. In doing so, it also recognises the public education role of this position, and the possibility, given that science and scientific research is contestable, that the occupant of the position may express controversial views. The terms of the appointment should be such that the Office of the Chief Scientist will be subject to public accountability equivalent to that applying to other senior public servants.

The Government minority report rejected the Committee's findings.

Regards,
Bradley Smith
Executive Director

Media Release 09/04 - 5 August 2004
Scientists welcome Recommendation for a Full-Time Chief Scientist

FASTS have welcomed a key recommendation of a Senate Employment, Workplace Relations and Education References Committee report that the Chief Scientist be a full time position. The President of FASTS, Professor Snow Barlow, said the importance of science in economic, environment and social domains warranted a full time chief scientist.

"A full-time Chief Scientist will play a larger role in a whole-of-government approach to science and technology and enhance co-ordination across portfolios. The necessity for all levels of Government to be well informed by good science has never been higher. Science, mathematics and technology underpin economic success and innovation in the global knowledge economy."

"The capacity of Governments to make good policy in a wide range of areas including health, environment, agriculture, defence, communications and quarantine is increasingly dependent on science. Good Government needs high level scientific advice and a full-time Chief Scientist is one critical avenue for this."

"Not only is the scope of the responsibilities of the Chief Scientist immense, but having a full-time Chief Scientist would send a clear message of the importance that Government places on this role," concluded Professor Barlow.

Media Inquiries: Bradley Smith (0408) 511 261

Science meets Parliament wins Eureka Prize - 10 August 2004

I am delighted to advise that Ken Baldwin - Chair of FASTS policy committee - has won the Australian Government Eureka Prize for Promoting Understanding of Science for initiating and championing 'Science meets Parliament'.

The award - which will be officially announced this evening - is a fitting reward for someone who has been a wonderful contributor to FASTS, science and physics.

There are many people who make 'Science meets Parliament' a success and I would like to acknowledge the support of the parliamentarians, our sponsors, the efforts of Robyn and Toss in our office and the contributions of the 800 scientists and the societies who have participated over the years.

Regards
Snow Barlow
President, FASTS

Latham Hints on R&D - 10 August 2004

At an Australian Industry Group forum yesterday, Mark Latham outlined some of the ALP's priorities on economic growth. The comments on R&D were very general and in questions after the speech he said ALP were considering lifting the R&D concession back up to 150%.

It is known ALP will be releasing a research and science policy at some stage in the lead up to the election. My own guess is that we are unlikely to see a change in the quantum of funding but that some programs will be adjusted including, for instance, the criteria for CRCs, the RTS formula (although that is under review currently) and making the Chief Scientist a full time position.

The relevant excerpt from his speech on R&D is appended below.

Regards,
Bradley Smith
Executive Director, FASTS

"So, too, Australia also needs to lift its performance for research and development. In the past, economists argued that material goods such as consumption and capital investment were the main drivers of economic growth. But now the new growth theorists have highlighted the importance of know-how - the importance of research and technology. In the long run, open and creative economies that apply new ideas to the production process will achieve the highest rates of growth. This is where Australia is most vulnerable.

The Howard Government has given a low priority to education and innovation. As Australia's leading new growth theorist, Steve Dowrick, has argued:

'Compared with the OECD economies, Australia invests less of its resources into R&D, and a smaller proportion of that investment is carried out within the business sector. Even though an open economy can benefit substantially from research conducted overseas, the magnitude of the returns to domestic R&D are such that a major increase in research effort is called for, especially in the case of a relatively poor R&D performer like Australia. So Dowrick's research points to the need to do more in the area of R&D and innovation. And, of course, these economic advantages spill over to huge social returns on R&D.

The dispersed nature of knowledge produces this important effect. Education and research outlays generate huge spill over benefits for society. For R&D expenditures, Dowrick estimates a social return of between 50 and 60 percent, an extremely high rate of public benefit. So this is an incredibly smart and important thing for the Australian government to invest in.

What does this mean for economic policy? Two conclusions stand out. The case for increased government investment in education and research is absolutely compelling. But so, too, increased private sector investment is in the public interest, especially when it lifts inventiveness and product innovation.

This is not a zero-sum exercise. The unique nature of knowledge investments can produce win-win outcomes in public policy. The best way of increasing Australia's economic growth rate is to increase the level of education, training and research. This is the basis of Labor's productivity agenda. This is what we said is square in the centre of the economic debate - the need for increased investment in education, training and research, the key to productivity policy and economic growth for the future."

ALP announcement on $35m centre of excellence in tropical research - 27 August 2004

ALP have just announced they will:

"establish a $35m Centre of Excellence in Tropical Research to secure the future of the two Australian icons, the Great Barrier Reef and North Queensland's tropical rainforest."

The future health of research into the reef and rainforest has been in doubt since the Howard Government defunded the research centres that maintained these fragile treasures earlier this year. The Howard Government cut public interest research out of the grant criteria, leaving the reef and rainforest CRCs stranded Funding certainly is needed now for reef and rainforest research. Without Labor's new Centre of Excellence wind-up proceedings will commence before the end of the year for both centres. Already leading researchers are being lured overseas.

Labor is confident that today's announcement will guarantee the future of critical reef and rainforest research in Australia. Labor will be providing $15 million for research into the rainforests and a further $20 million for reef research. Labor will be seeking to ensure that the original public and private partners rejoin the projects, bringing with them more researchers and resources.

Under the scheme reef research will extend off the north-west coast, into the Timor and Arafura seas. Partners in the reef research bid included AIMS, the ANU, CSIRO, the National Oceans Office, Charles Darwin University and private sector partners."

Regards,
Bradley Smith

FASTS August Newsletter

The August newsletter from FASTS is now posted on their web site www.fasts.org and readily downloadable as a 46 KB pdf. The key topics/highlights are listed below.

1. Science Meets Parliament wins Eureka Award
2. FASTS Election Statement 2004
3. FASTS Calendar for 2004
4. Beyond the 'Brain Drain'
5. FASTS Structure and Constitution
6. FASTS Conference in 2005 - The Governance of Science
7. Government announces changes to Biosecurity Australia.
8. New CEO for the Australian Research Council
9. Exclusive offer for FASTS Members for NewScientist

Robyn Easton,
FASTS

Women in Australian Science: Successful Despite the Odds - Canberra on 11September.

Manning Clark House in Canberra are hosting a forum called Women in Australian Science: Successful Despite the Odds. It will take place from 2 to 4pm on Saturday, 11September, at the House, 11 Tasmania Circle, Forrest, ACT.

The speakers are:

- Dr Anna Robinson, biological chemist at the Centre for Bioinformation Science, John Curtin School of Medical Research, ANU. Dr Robinson is also national convenor of the Women in Science Enquiry Network (WISENET), which aims to increase women's participation in the sciences. She will speak on Honouring Women Scientists.

- Dr Elizabeth Truswell, FAA, former Chief Research Scientist at the Australian Geological Survey Organisation, and landscape artist. She will speak on Celebrating the Past in Science and Art.

- Dr Kim Blackmore, mathematician in the ANU Department of Engineering. S he will speak on The Challenge for Women in Mathematics and Education.

The forum will be chaired by Dr Ann Moyal AM, distinguished historian of Australian science and technology. Dr Moyal is the founding president of the Independent Scholars Association of Australia.

Entry is by gold coin donation, and afternoon tea will be served. Those wishing to attend should book on 6295 9433.

Bradley Smith,
Executive Director
FASTS

CONFERENCE CAPERS

The 7th INTECOL International Wetlands Conference held in Utrecht, The Netherlands from 25 - 30 July 2004

The conference mission was: *"To highlight the newest developments in Wetland Science with all its major disciplines and to review this knowledge in the perspective of integrated water resources management world-wide".*

Approximately 900 participants (including about 30 Australians) from 81 countries attended. Up to 11 concurrent sessions were held, which would normally pose a horizontal challenge when moving between sessions, however, in Utrech we were vertically challenged with sessions spread over seven floors of the Convention Centre. See www.bio.uu.nl/intecol for conference and program details.

The conference was extremely stimulating with nine themes:

1. *The role of wetlands for integrated water resources management*
2. *Wetland science for environmental management*
3. *Biogeochemical functioning of wetlands*
4. *Functioning of plants in the wetland environment*
5. *Conservation and management of wetlands*
6. *Wetlands restoration and creation*
7. *Wetlands and climate change worldwide*
8. *Wetlands for water quality improvement*
9. *Functioning and wise use of tropical wetlands*

Of particular interest was the number of papers given on the dispersal of seeds and eggs within wetlands and techniques that can be used to measure dispersal.

Utrech itself was a wonderful place to visit with lots of museums and good eating places. A word of warning to anyone venturing to Utrech though - watch out for the bikes!

Some trivia:

- The highest point in The Netherlands is 300m above sea level (partway up a mountain on the border).
- Schiphol airport is 5m below sea level.
- The area around Utrech is flat, but old paintings of Urtech always show it on a hill.
- A coffee house sells coffee.
- A coffee shop doesn't sell coffee.
- You can seat one adult and two kids on a normal push bike.
- There are more bikes than cars and they have multi-story bike parking.

To view the Final Resolution adopted at the Conference visit: http://www.bio.uu.nl/intecol/declaration/

Daryl Nielsen, MDFRC (Albury)

HONOURS SUMMARY

The Role of Aquatic Sediments in Blue-Green Algal Blooms of the Ornamental Lake

By Katrina Lansdown and Dr. Mike Grace, Water Studies Centre, School of Chemistry, Monash University

Since 1986 the Ornamental Lake in the Royal Botanic Gardens Melbourne (RBG Melbourne) has suffered from regular incidences of blue-green algal blooms almost every year. The dominant algal species have been *Anabaena circinalis*, and to a lesser extent, *Microcystis aeruginosa*. The main hydrodynamic factor influencing the formation of the algal blooms appears to be periods of thermal stratification, accompanied by very low DO concentrations in the hypolimnion, during Summer and early Autumn. The very high concentration of phosphorus in the water column further adds to the algal bloom problem.

Despite attempts to reduce external inputs rich in phosphorus entering the Ornamental Lake, through use of zero-P fertilizers, the annual algal bloom events still persist. To investigate the contribution of the aquatic sediments to the phosphorus load of the Ornamental Lake water column (internal loading) a study is currently being undertaken by the Monash University Water Studies Centre in conjunction with RBG Melbourne.

Deployment of numerous porewater peepers (or *in situ* equilibrium dialysis samplers) at various sites within the Ornamental Lake by Katrina Lansdown, as part of her Honours project, has allowed the porewater concentrations of nutrients to be measured. From this data, nutrient fluxes from the sediment porewater to the overlying water column can be predicted.

Major findings from the peeper deployments include:

- The porewater concentration of phosphorus (as FRP) is very large, as high as 4mg/L in the shallow porewater (depth ~1cm).
- The sediments become anoxic at shallow depths.
- The diffusive flux of phosphorus from sediment porewater is likely to be a significant source of phosphorus to the overlying water column. Predicted fluxes range from to 12 to 95 kg P/ year! However, these figures are based upon the assumption of Fickian diffusion, which does not consider the role of iron in the surficial sediments.

It has been shown by others that the diffusion of phosphorus in natural systems often does not obey Fick's first law of diffusion. Therefore, laboratory incubations of sediment cores ("bioreactors") have been undertaken in an attempt to measure actual phosphorus fluxes. The incubation period has just ended and the samples collected are still in the process of being analysed. It is hoped that the results of this latest experiment will show that the predicted fluxes are indeed overestimates of the actual phosphorus fluxes. However, results of the study to date suggest that the aquatic sediments do play a role in supplying phosphorus to the water column of the Ornamental Lake and therefore in fuelling algal growth.

FORTHCOMING CONFERENCES/WORKSHOPS

OVERSEAS

2004

2nd National Conference on Coastal and Estuarine Habitat Restoration is to be held from 12 to 15 September in Seattle, Washington USA. For further information concerning the Conference or Registration, go to www.estuaries.org or email to: registration@estuaries.org

2005

ASLO 2005 Aquatic Sciences Meeting, to be held in Salt Lake City, Utah, USA from 20 to 25 February. Further information visit: http://aslo.org/meetings/slc2005/

ASLO Summer Meeting: *A Pilgrimage Through Global Aquatic Sciences* will be held in Santiago de Compostela (NW Spain) from 19 to 24 June. Further information visit: http://aslo.org/meetings/santiago2005/

AUSTRALIAN

2004

2004 Australian Society for Fish Biology Workshop and Conference (ASFB*2004*) will take the form of a National Symposium on Ecosystem Research and Management of Fisheries (Adelaide, from 19 to 21 September), followed by the **ASFB Annual Conference** (Glenelg, from 22 to 24 September). Contact the Symposium and Conference Secretariat for further information [carolyn.anderson@cmmg.com.au]

THE WETLANDS CENTRE SERIES: Innovations, Obligations and Incentives to be held on 21 September at the Wetlands Centre Australia. For further information contact Kylie Yeend on (02) 49516466, email ramsar@wetlands.org.au, or go to The Wetlands Centre's website using the link: http://www.wetlands.org.au/forum.htm

4th International Symposium on Extant and Fossil Charophytes, to be held at Robertson (NSW) from 25 to 27 September. Check the Symposium website at: www.uow.edu.au/science/geosciences/conferences/irgc04

Freshwater Protected Areas: new and existing tools for conserving freshwater ecosystems, organised by the Inland Rivers Network and World Wide Fund for Nature - Australia to be held 27 and 28 September in Sydney. For more information, please contact Brendan Fletcher, Coordinator Inland Rivers Network, phone (02) 9212 5112 or email: coordinator@irnnsw.org.au

Wood in Streams: Current Research Methods and Directions, to be held at Monash University Gippsland Campus, Churchill, Victoria on 29 and 30 September. See http://www.gippsland.monash.edu.au/science/research/conferences/wood/ for further information.

Water Efficiency 2004 - Regulation and Best Practice will be held on 20 and 21 October (during National Water Week) in Sydney. The aim of Water Efficiency 2004 is to achieve a common understanding on the best way forward for a national approach to regulations for improving water efficiency and developing some permanent controls over the use of water. Visit http://www.awa.asn.au/events/efficiency04/ for more information.

4th Australian Stream Management Conference 'Linking Rivers to Landscapes' to be held at the Country Club Resort, Prospect Vale, Launceston from 20 to 22 October. For further information contact Conference Design Pty Ltd phone (03) 6224 3773 or Email: mail@cdesign.com.au

1st National Salinity Engineering Conference to be 9 to 12 November at Burswood International Resort, Perth, WA. This will be the first national conference specifically convened to focus on engineering solutions to both dryland and irrigation induced salinity. Further information visit: http://www.congresswest.com.au/salinity2004/

International Conference on Water Sensitive Urban Design 'Cities as Catchments" is to be held at the Adelaide Hilton from 21 to 24 November. Register at www.plevin.com.au/WSUD2004

43rd Annual ASL Congress to be held at The University of Adelaide from 29 November to 3 December. Check out the web: http://www.asl.org.au/

Australasian Society for Phycology and Aquatic Botany Inc. will be held in Adelaide immediately after the ASL Congress from 5 to 8 December. Visit the Conference web site at http://conference.aspab.cjb.net for additional information.

2004 World Conference on Natural Resource Modelling 'Understanding and managing complex systems' within the context of natural resources, will be held at RMIT University, Melbourne from 12 to 15 December. Check ou the web for further information: http://www.ma.rmit.edu.au/2004RMAconference/

2005

The 8th International Conference on the Biogeochemistry of Trace Elements (ICOBTE) will be held at the Adelaide International Convention Centre, Adelaide from 3 to 7 April. More information visit: www.clw.csiro.au/conferences/8thICOBTE/

9th Conference International Society for Salt Lake Research (ISSLR), to be held at Curtin University of Technology, WA from 26 to 30 September. Further information from j.john@curtin.edu.au

44th Annual ASL Congress is planned to be in Tasmania, probably during September common week.

ASL VOLUNTEERS

The following members have volunteered to speak as experts on behalf of the ASL.

If you wish to be included on the list or amend your contact details, please contact:

Dr Richard Marchant (ASL Secretary)
Email: rmarch@museum.vic.gov.au

Prof Angela Arthington:
in stream flows, ecology of exotic fishes, conservation of rare fishes.
Centre for Riverine Landscapes, Griffith University, Natham Qld. 4111.
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bacteriological issues, wetlands.
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Dr Margaret Brock:
temporary wetlands, aquatic plants.
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Mr Stefan Eberhard:
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Dr Tim Entwisle:
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Dr Max Finlayson:
wetlands, Ramsar convention.
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Dr Mike Grace:
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[1] Rich Text Format (.rtf) is a format that can be opened in any word processor, although slight variations in layout may occur in different programs.

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